

Survey Summary Report:
Numbers and Types of Responses,
Educational Audiologists

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Contents

Sampling and Response Rates.....	1
Table 1. Significance Tests and Conclusions	2
ASHA Services and Programs: Q 1	3
Employment and Earnings: Qs 2–11	4
Caseload/Workload: Qs 12–24	10
Demographics: Qs 25–28	22
Appendix A: Regions of the Country	27
Appendix B: Statistics.....	29
Appendix C: Open-Ended Responses	32

Sampling and Response Rates

The entire population of 649 ASHA-certified educational audiologists in ASHA's membership database who were identified as employed full time or part time in a school setting were selected for the *2022 Schools Survey*.

An additional 8,000 ASHA-certified speech-language pathologists (SLPs) with schools as their primary employment facility were also selected. Their results appear in a separate report. This report is limited to responses from individuals with a Certificate of Clinical Competence in Audiology (CCC-A) only.

An overall response rate of 37.8% was obtained for audiologists and SLPs combined (3,191 completed surveys from a net sample of 8,440 eligibles). The response rate for audiologists was **36.3%** (230 completed surveys from a net sample of 634 eligible respondents). These percentages are unweighted.

The *All Responses* column throughout the report reflects results for respondents from two facility types (elementary schools and combinations from the presented list) as well as from the 16 respondents who were employed in special day/residential schools, eight in preschools, 19 in secondary schools, one in students' homes, six in administrative offices, and three who did not answer the question about facility type. Therefore, the *All Responses* column may not be the sum of the *ns* in the other two columns.

Data are not presented for table cells with fewer than 25 respondents, and administrative offices were excluded for questions where responses were limited to clinical service providers.

Few questions in the survey resulted in statistically significant differences; that is, it was rare that the responses from audiologists in elementary schools differed from those in combined school settings. One reason for this may be that combined settings included employment in elementary schools as one of the employment facilities for an unknown number of respondents.

Tests of statistical significance are presented throughout the report as appropriate. Conclusions are not presented with each question in order to keep the data tables as uncluttered as possible. However, the following conclusions can be used, depending on the result of the significance testing (see Table 1 for examples). In the first row, where the probability is less than .05 and the *p* value is bolded, it is possible to discuss differences in responses by facility; in the second and third rows, that is not the case.

Table 1. Significance Tests and Conclusions	
Sample Significance Test	Sample Conclusion
Statistical significance: $\chi^2(2) = 114.9$, $p = .000$	Conclusion: There is adequate evidence from the data to say that the responses vary by type of facility. The p value is less than .05.
Statistical significance: $\chi^2(2) = 2.3$, $p = .320$	Conclusion: There is not enough evidence from the data to say that the responses vary by type of facility. The p value is greater than .05.
Too many cells (25%) have an expected count of fewer than 5.	Conclusion: Too little data are available in some categories to test whether responses vary by type of facility.

A description of statistical terms used in the report can be found in Appendix B at the end of the report.

ASHA Services and Programs

1. In your opinion, what kind of job is the Association doing in serving its school-based members? (Percentages) Analyses limited to respondents who met the following criterion: ❖ CCC-A			
Response	Facility Type		
	All Responses (n ≥ 221)	Elementary (n ≥ 60)	Combination (n ≥ 109)
With Overall Needs			
Poor	4.1	3.3	3.6
Fair	28.8	42.6	29.1
Good	41.0	39.3	39.1
Excellent	6.8	3.3	9.1
Don't know, NA	19.4	11.5	19.1
		Too many cells (30%) have an expected count of less than 5.	
With Advocacy			
Poor	5.0	5.0	3.7
Fair	29.9	43.3	28.4
Good	31.2	30.0	29.4
Excellent	6.8	5.0	8.3
Don't know, NA	27.1	16.7	30.3
		Too many cells (30%) have an expected count of less than 5.	
With Answering School-Based Practice Questions			
Poor	3.2	0.0	2.7
Fair	27.5	41.7	24.5
Good	35.6	36.7	36.4
Excellent	5.4	3.3	7.3
Don't know, NA	28.4	18.3	29.1
		Too many cells (30%) have an expected count of less than 5.	
(Question 1 continues on next page.)			

1. (cont'd) In your opinion, what kind of job is the Association doing in serving its school-based members? (Percentages)

Analyses limited to respondents who met the following criterion:

❖ CCC-A

Response	Facility Type		
	All Responses (n ≥ 221)	Elementary (n ≥ 60)	Combination (n ≥ 109)
With Continuing Education			
Poor	10.8	13.1	10.9
Fair	32.3	42.6	29.1
Good	28.3	26.2	27.3
Excellent	11.2	6.6	15.5
Don't know, NA	17.5	11.5	17.3
		Statistical significance: $\chi^2(4) = 5.7$, $p = .223$	
With Resources			
Poor	5.4	4.9	5.5
Fair	23.8	32.8	20.9
Good	40.4	37.7	44.5
Excellent	11.2	9.8	11.8
Don't know, NA	19.3	14.8	17.3
		Statistical significance: $\chi^2(4) = 3.0$, $p = .566$	

Employment and Earnings

2. Which ONE of the following categories best describes your employment status? (Percentages)

Analyses limited to respondents who met the following criterion:

❖ CCC-A

Status	Facility Type		
	All Responses (n = 230)	Elementary (n = 63)	Combination (n = 114)
Employed full time	84.3	82.5	84.2
Employed part time	15.7	17.5	15.8
Not currently employed (SKIP to Thank you at the end of the survey.)	Removed from analyses		
		Statistical significance: $\chi^2(1) = 0.1$, $p = .774$	

3. Which ONE of the following best describes your principal employment situation? (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Situation	Facility Type		
	All Responses (n = 229)	Elementary (n = 63)	Combination (n = 113)
Salaried employee	89.1	85.7	90.3
Contractor	8.3	14.7	7.1
Self employed	2.6	1.6	2.7
Too many cells (33%) have an expected count of less than 5.			

4. In your primary job, are you paid on an annual basis or an hourly basis? *Select one response only.* (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Basis	Facility Type		
	All Responses (n = 229)	Elementary (n = 63)	Combination (n = 113)
Annual salary	89.1	85.7	89.4
Hourly rate (SKIP to Q. 12.)	10.9	14.3	10.6
Statistical significance: $\chi^2(1) = 0.5$, $p = .472$			



5. What is your gross annual income for your primary job, before all deductions?
 Analyses limited to respondents who met the following criteria:
- ❖ CCC-A
 - ❖ Employed full time
 - ❖ Annual salary of at least \$1

Response	Facility Type		
	All Responses	Elementary	Combination
Worked 9–10 months (academic year)			
	<i>n</i> = 141	<i>n</i> = 39	<i>n</i> = 71
25th percentile	\$65,853	\$65,000	\$67,000
50th percentile (Median)	\$76,000	\$73,000	\$78,000
75th percentile	\$88,409	\$89,000	\$88,818
Mean	\$78,170	\$77,184	\$78,826
Standard deviation	\$18,085	\$18,115	\$18,158
Mode	\$80,000	\$69,000	\$75,000
		Statistical significance: $F(1, 108) = 0.2$, $p = .651$	
Worked 11–12 months (calendar year)			
	<i>n</i> = 30	<i>n</i> = 3	<i>n</i> = 15
25th percentile	\$72,345	<i>(n</i> < 25)	<i>(n</i> < 25)
50th percentile (Median)	\$84,000		
75th percentile	\$100,750		
Mean	\$88,201		
Standard deviation	\$19,800		
Mode	\$100,000		

ASHA 2022 Schools Survey: Survey Summary Report, Educational Audiologists

6. For what period of work is this? *If you work for 9–10 months but are paid over a 12-month period, select the first response. Select one response only; then SKIP to Q. 9.* (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Response	Facility Type		
	All Responses (n = 200)	Elementary (n = 54)	Combination (n = 97)
Work 9 or 10 months per year	84.5	94.4	84.5
Work 11 or 12 months per year	15.5	5.6	15.5
Work other period	Removed from analyses		
		Statistical significance: $\chi^2(1) = 3.2$, $p = .072$	

7. If you are paid on an hourly basis, what is the hourly rate you receive at your primary job? *Include your hourly rate before all deductions.*

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Hourly salary of at least \$1
- ❖ Worked at least 1 hour per week

Response	Facility Type		
	All Responses (n = 23)	Elementary (n = 8)	Combination (n = 11)
25th percentile	(n < 25)	(n < 25)	(n < 25)
50th percentile (Median)			
75th percentile			
Mean			
Standard deviation			
Mode			

8. How many hours do you work per week for the hourly rate you entered in Q. 7?

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Hourly salary of at least \$1

Hours	Facility Type		
	All Responses (n = 25)	Elementary (n = 9)	Combination (n = 12)
25th percentile	7.0	(n < 25)	(n < 25)
50th percentile (Median)	15.0		
75th percentile	21.3		
Mean	15.5		
Standard deviation	10.7		
Mode	15.0		

9. Do you receive a salary supplement, stipend, bonus, or other type of “salary upgrade” during the current school year for any of the following reasons? *Select one response for each row.* (Survey instrument responses were Yes and No; report presents percentage of those who selected Yes.)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Option	Facility Type		
	All Responses	Elementary	Combination
	<i>n</i> = 227	<i>n</i> = 61	<i>n</i> = 113
ASHA CCCs	29.1	31.1	25.7
Statistical significance: $\chi^2(1) = 0.6$, $p = .440$			
	<i>n</i> = 217	<i>n</i> = 59	<i>n</i> = 107
Multilingual skills/experience	3.2	3.4	2.8
Too many cells (50%) have an expected count of less than 5.			
	<i>n</i> = 213	<i>n</i> = 56	<i>n</i> = 106
Certified specialization areas (e.g., reading/literacy, autism)	0.9	3.6	0.0
Too many cells (50%) have an expected count of less than 5.			
	<i>n</i> = 218	<i>n</i> = 60	<i>n</i> = 107
Medicaid billing	2.8	3.3	3.7
Too many cells (50%) have an expected count of less than 5.			
	<i>n</i> = 212	<i>n</i> = 63	<i>n</i> = 114
Supervision	2.6	1.6	4.4
Too many cells (50%) have an expected count of less than 5.			

10. Although you may work in several types of facilities, select the ONE type of building that best describes where most of your students will be when they return from COVID-19 to their assigned locations. *Those who provide services via private practice, early intervention, or telepractice should also select where their students would be. Only one response can be accepted.* (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Facility	<i>n</i>	Percentages
Special day/residential school	16	7.0
Pre-elementary (preschool)	8	3.5
Elementary school	63	27.8
Secondary school (middle school, junior high, senior high)	19	8.4
Student's home	1	0.4
Administrative office	6	2.6
Combination from the above list	114	50.2
Other; specify:	0	0.0
Total	227	100.0

11. Although you may perform more than one job function, select the ONE position that best describes how you spend most of your time. *Only one response can be accepted.* (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Function	Facility Type		
	All Responses (<i>n</i> = 221)	Elementary (<i>n</i> = 59)	Combination (<i>n</i> = 112)
Clinical service provider (includes all audiologists and SLPs who provide any direct service)	76.5	72.9	83.0
Diagnostician	7.7	8.5	5.4
Special education teacher	1.4	1.7	0.9
Consultant	11.3	13.6	8.9
Administrator/supervisor/director	3.2	3.4	1.8
Other; specify:	0.0	0.0	0.0
			Too many cells (50%) have an expected count of less than 5.

Caseload/Workload

“Caseload” is based only on the number of students served, whereas “workload” is based on ALL required and performed activities.

<p>12. Using the description above, which approach is used to determine the number of students you serve? <i>Select all that apply.</i> (Percentages) Analyses limited to respondents who met the following criteria:</p> <ul style="list-style-type: none"> ❖ CCC-A ❖ Clinical service provider ❖ Employed full time or part time 			
Approach	Facility Type		
	All Responses	Elementary	Combination
	<i>n</i> = 157	<i>n</i> = 40	<i>n</i> = 86
Caseload approach	49.7	65.0	47.7
Workload approach	41.4	27.5	43.0
Caseload approach and workload approach	7.0	7.5	7.0
I do not provide clinical services to students. (SKIP to Q. 23.)	1.9	0.0	2.3
		Too many cells (38%) have an expected count of less than 5.	
Caseload and/or Workload Approach			
	<i>n</i> = 154	<i>n</i> = 40	<i>n</i> = 84
Caseload approach	50.6	65.0	48.8
Workload approach	42.2	27.5	44.0
Caseload approach and workload approach	7.1	7.5	7.1
		Statistical significance: $\chi^2(2) = 3.2$, $p = .198$	

13. What is your average monthly caseload size? *Count each student only once.*

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response greater than 0

Caseload Size	Facility Type		
	All Responses (n = 108)	Elementary (n = 27)	Combination (n = 58)
25th percentile	40.8	40.0	48.0
50th percentile (Median)	62.5	63.0	70.0
75th percentile	85.0	100.0	90.0
Mean	67.6	71.0	70.0
Standard deviation	37.9	51.0	34.0
Mode	50.0	20.0	100.0
		Statistical significance: $F(1, 83) = 0.0$, $p = .992$	

14. What do you consider to be a manageable monthly caseload size for YOUR caseload?

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response greater than 0

Caseload Size	Facility Type		
	All Responses (n = 100)	Elementary (n = 24)	Combination (n = 55)
25th percentile	40.0	$(n < 25)$	40.0
50th percentile (Median)	50.0		60.0
75th percentile	75.0		75.0
Mean	57.3		60.0
Standard deviation	28.7		27.0
Mode	50.0		50.0
			Statistical significance: $F(1, 77) = 0.0$, $p = .890$

ASHA 2022 Schools Survey: Survey Summary Report, Educational Audiologists

15 – CONTROL. Are you required to make up missed sessions? [Control group version]
Select all that apply. (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time
- ❖ Control group (select all that apply from a list of four)

Response	Facility Type		
	All Responses (n = 89)	Elementary (n = 26)	Combination (n = 47)
I am not required to make up missed sessions.	43.8	42.3	46.8
		Statistical significance: $\chi^2(1) = 0.1$, $p = .711$	
When the student misses a session due to assembly or classroom activity.	7.9	11.5	4.3
		Too many cells (50%) have an expected count of less than 5.	
Any time a student misses a session for any reason.	11.2	3.8	14.9
		Too many cells (25%) have an expected count of less than 5.	
Any time I miss a session for any reason.	32.6	34.6	31.9
		Statistical significance: $\chi^2(1) = 0.1$, $p = .814$	

15 – EXPERIMENTAL. Are you required to make up missed sessions? [Experimental group version] *Select one.* (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time
- ❖ Experimental group (select one from a list of three)

Response	Facility Type		
	All Responses (n = 66)	Elementary (n = 13)	Combination (n = 38)
Yes – but only for a few circumstances	18.2	(n < 25)	13.2
Yes – always or almost always	34.8		31.6
No – never or almost never	47.0		55.3
		Too many cells (50%) have an expected count of less than 5.	

District:

For Questions 16 and 24, “district” also includes co-ops, intermediate units, and other groupings of districts for administrative purposes.

16. What is the SINGLE greatest barrier to achieving a manageable caseload size? Only one response can be accepted. (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time or part time

Barrier	Facility Type		
	All Responses (n = 141)	Elementary (n = 34)	Combination (n = 78)
No barrier; my caseload is manageable.	48.9	52.9	47.4
Difficulty with dismissal of students from services	2.8	0.0	3.8
District policy	3.5	5.9	3.8
Lack of administration support	13.5	23.5	10.3
Shortage of educational audiologists in my area	16.3	11.8	17.9
Shortage of SLPs in my area	1.4	2.9	0.0
Shortage of assistants or aides in my area	2.8	0.0	2.6
State policy	0.7	0.0	0.0
Other; specify:*	9.9	2.9	14.1
		Too many cells (63%) have an expected count of less than 5.	

* Specified “other” open-ended responses can be found in Appendix C.



17. How many students do you serve in a typical month in each of the following areas?
Students who have overlapping areas of intervention may be counted more than once.
 Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q. 13 (caseload size) is at least 1

Area of Intervention	Facility Type			
	All Responses		Elementary	
	Percentage who regularly serve clients with this disorder	Number served (mean)*	Percentage who regularly serve clients with this disorder	Number served (mean)*
	<i>n</i> = 108	<i>n</i> varies	<i>n</i> = 27	<i>n</i> varies
Acquired brain injury (ABI)	13.0	1.6**	14.8	1.8**
Auditory processing disorder (APD)	56.5	7.3	51.9	6.6**
Augmentative and alternative communication (AAC)	25.0	5.6**	14.8	6.5**
Autism spectrum disorder (ASD)	54.6	8.9	51.9	11.8**
Childhood apraxia of speech (CAS)	12.0	2.0**	11.1	1.3**
Cognitive communication disorders	27.8	10.5**	22.2	13.8**
Dysphagia (swallowing/feeding)	2.8	1.0**	3.7	1.0**
Fluency disorders	12.0	2.7**	11.1	2.3**
Gender affirming voice	0.9	2.0**	0.0	0.0
Hearing loss	93.5	65.3	88.9	64.3**
Language disorders: pragmatics/social communication	26.9	32.6**	22.2	32.5**
Language disorders: semantics, morphology, syntax	24.1	38.9**	22.2	24.7**
Reading and writing (literacy)	21.3	38.7**	11.1	49.7**
Selective mutism	4.6	1.3**	0.0	0.0
Speech sound disorders	22.2	31.1**	18.5	26.8**
Voice or resonance disorders	5.6	13.0**	0.0	0.0

(Question 17 continues on next page.)

Note. CCC-A = audiologist.

*Includes only SLPs who do serve these students. **This data point came from a small sample (*n* < 25) and is less reliable.

17. (cont'd) How many students do you serve in a typical month in each of the following areas? *Students who have overlapping areas of intervention may be counted more than once.*

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q. 16 (caseload size) is at least 1

Area of Intervention	Facility Type Combination	
	Percentage who regularly serve clients with this disorder	Number served (mean)*
	<i>n</i> = 58	<i>n</i> varies
Acquired brain injury (ABI)	13.8	1.8**
Auditory processing disorder (APD)	62.1	7.8
Augmentative and alternative communication (AAC)	31.0	5.8**
Autism spectrum disorder (ASD)	60.3	7.9
Childhood apraxia of speech (CAS)	8.6	2.2**
Cognitive communication disorders	32.8	13.8**
Dysphagia (swallowing/feeding)	3.4	1.5**
Fluency disorders	10.3	3.8**
Gender affirming voice	0.0	0.0
Hearing loss	96.6	62.4
Language disorders: pragmatics/ social communication	29.3	30.2**
Language disorders: semantics, morphology, syntax	24.1	39.3**
Reading and writing (literacy)	24.1	40.0**
Selective mutism	6.9	1.0**
Speech sound disorders	22.4	36.5**
Voice or resonance disorders	6.9	11.5**

Note. CCC-A = audiologist.

*Includes only SLPs who do serve these students. **This data point came from a small sample (*n* < 25) and is less reliable.

ASHA 2022 Schools Survey: Survey Summary Report, Educational Audiologists

18. What are your greatest challenges as a school-based professional? *Select all that apply.* (Percentages) Responses were in alphabetical order on survey instrument. Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider

Challenge	Facility Type		
	All Responses (n = 169)	Elementary (n = 43)	Combination (n = 93)
Limited family/caregiver involvement and support	46.7	48.8	47.3
			Statistical significance: $\chi^2(1) = 0.0$, $p = .868$
Limited understanding of my role by others	46.2	46.5	50.5
			Statistical significance: $\chi^2(1) = 0.2$, $p = .662$
Large amount of paperwork	44.4	46.5	44.1
			Statistical significance: $\chi^2(1) = 0.1$, $p = .791$
Budget constraints	37.3	37.2	35.5
			Statistical significance: $\chi^2(1) = 0.0$, $p = .845$
Volume of meetings	34.3	41.9	32.3
			Statistical significance: $\chi^2(1) = 1.2$, $p = .276$
Inadequate work space and facilities	32.0	37.2	29.0
			Statistical significance: $\chi^2(1) = 0.9$, $p = .340$
High workload/caseload size	32.0	32.6	33.3
			Statistical significance: $\chi^2(1) = 0.0$, $p = .929$
Lack of funding to attend professional development programs	29.6	39.5	32.3
			Statistical significance: $\chi^2(1) = 0.7$, $p = .407$
Travel/distance between schools	27.2	18.6	32.3
			Statistical significance: $\chi^2(1) = 2.7$, $p = .099$
Out-of-pocket professional expenses	26.0	32.6	28.0
			Statistical significance: $\chi^2(1) = 0.3$, $p = .584$
(Question 18 continues on next page.)			

ASHA 2022 Schools Survey: Survey Summary Report, Educational Audiologists

18. (cont'd) What are your greatest challenges as a school-based professional? *Select all that apply.* (Percentages) Responses were in alphabetical order on survey instrument. Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider

Challenge	Facility Type		
	All Responses (n = 169)	Elementary (n = 43)	Combination (n = 93)
Limited support from the administration	24.3	30.2	25.8
		Statistical significance: $\chi^2(1) = 0.3$, $p = .590$	
Incorporating optimal service delivery models	20.7	9.3	26.9
		Statistical significance: $\chi^2(1) = 5.4$, $p = .020$, $\Phi = .200$	
Personnel shortage	20.1	27.9	18.3
		Statistical significance: $\chi^2(1) = 1.6$, $p = .202$	
Limited time for collaboration	18.9	18.6	19.4
		Statistical significance: $\chi^2(1) = 0.0$, $p = .918$	
Low salary	17.8	18.6	15.1
		Statistical significance: $\chi^2(1) = 0.3$, $p = .601$	
Providing clinical services for multilingual students and families	16.0	20.9	17.2
		Statistical significance: $\chi^2(1) = 0.3$, $p = .602$	
Lack of training to work with specific disorders or special populations	10.7	14.0	9.7
		Too many cells (25%) have an expected count of less than 5.	
Ethical challenges	10.1	9.3	10.8
		Too many cells (25%) have an expected count of less than 5.	
Legal challenges (e.g., due process)	9.5	11.6	9.7
		Too many cells (25%) have an expected count of less than 5.	

19. During the current school year, how many hours did you spend using telepractice (for diagnostics, intervention, supervision, etc.)?

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Reported at least 1 hour per week

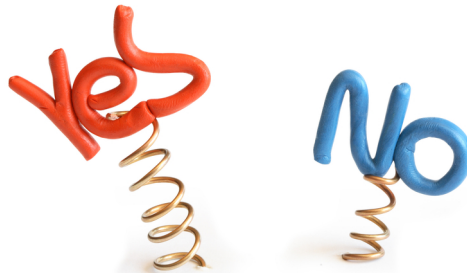
Hours	Facility Type		
	All Responses	Elementary	Combination
Lowest weekly number of hours			
	<i>n</i> = 28	<i>n</i> = 9	<i>n</i> = 16
25th percentile	1.3	<i>(n</i> < 25)	<i>(n</i> < 25)
50th percentile (Median)	3.0		
75th percentile	5.0		
Mean	4.7		
Standard deviation	7.2		
Mode	1.0		
Typical weekly number of hours			
	<i>n</i> = 44	<i>n</i> = 12	<i>n</i> = 25
25th percentile	2.0	<i>(n</i> < 25)	1.0
50th percentile (Median)	4.0		3.0
75th percentile	10.0		10.0
Mean	6.7		7.0
Standard deviation	7.8		9.0
Mode	1.0		10.0
		Statistical significance: $F(1, 35) = 0.028$, $p = .868$	
Highest weekly number of hours			
	<i>n</i> = 47	<i>n</i> = 13	<i>n</i> = 26
25th percentile	4.0	<i>(n</i> < 25)	4.0
50th percentile (Median)	10.0		9.0
75th percentile	16.0		15.0
Mean	12.9		12.0
Standard deviation	12.8		13.0
Mode	10.0		10.0
		Statistical significance: $F(1, 37) = 0.030$, $p = .863$	

20. How comfortable are you in providing services via telepractice? (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider

Response	Facility Type		
	All Responses (n = 144)	Elementary (n = 36)	Combination (n = 81)
1 – <i>Not at all comfortable</i>	25.7	25.0	28.4
2 – <i>Slightly comfortable</i>	26.4	27.8	25.9
3 – <i>Somewhat comfortable</i>	30.6	30.6	30.9
4 – <i>Very comfortable</i>	14.6	11.1	13.6
5 – <i>Extremely comfortable</i>	2.8	5.6	1.2
		Too many cells (30%) have an expected count of less than 5.	



21. During the current school year, have you worked on MTSS/RTI (multi-tiered system of support/response to intervention) activities? (Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider

Response	Facility Type		
	All Responses (n = 152)	Elementary (n = 39)	Combination (n = 83)
Yes	25.7	33.3	22.9
No	74.3	66.7	77.1
		Statistical significance: $\chi^2(1) = 1.5$, $p = .221$	

22. During the current school year, how many hours do you spend on each of the following activities in a typical WEEK? Enter "0" if none. (Mean hours)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider
- ❖ Employed full time
- ❖ Response to Q. 13 (caseload size) is at least 1
- ❖ Total number of hours for Q. 22 was limited to a maximum of 65 hours, which captured 94% of respondents.

Activity	Facility Type		
	All Responses (n = 95)	Elementary (n = 21)	Combination (n = 49)
Collaborative consultation	4.3	(n < 25)	5.2
Diagnostic evaluations (e.g., observation, screening, scoring, analysis)	10.1		9.8
Direct intervention	5.9		5.0
Documentation	7.3		5.8
Supervision	1.5		0.3
Technological support (e.g., hearing aids/CIs, AAC)	7.7		7.6
Other duties as assigned	3.6		4.7
Total hours	40.4		38.5
			Tests of significance could not be run using the available software.

Note. CI = cochlear implant. AAC = augmentative and alternative communication.



23. Have you used the ASHA Workload Calculator that is on ASHA’s website?
(Percentages)

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Clinical service provider

Workload Calculator	Facility Type		
	All Responses	Elementary	Combination
	<i>n</i> = 167	<i>n</i> = 43	<i>n</i> = 91
Yes	1.2	0.0	2.2
No, but I know what it is.	27.5	27.9	28.6
Don’t know what it is.	71.3	72.1	69.2
		Too many cells (33%) have an expected count of less than 5.	
	<i>n</i> = 48	<i>n</i> = 12	<i>n</i> = 28
Yes	4.2	<i>n</i> < 25	7.1
No, but I know what it is.	95.8		92.9
Don’t know what it is.	Removed from analyses		
		Too many cells (50%) have an expected count of less than 5.	

24. Is union representation available to you in your district? (Percentages)

Analyses limited to respondents who met the following criterion:

- ❖ CCC-A

Response	Facility Type		
	All Responses (<i>n</i> = 223)	Elementary (<i>n</i> = 62)	Combination (<i>n</i> = 109)
Yes	61.4	64.5	62.4
No	38.6	35.5	37.6
		Statistical significance: $\chi^2(1) = 0.1$, $p = .781$	

Demographics

25. Identify the degrees you have earned. *Count only actual degrees—not equivalencies or certificates—and do not include degrees expected but not yet conferred. Select all that apply.* (Percentages)

Analyses limited to respondents who met the following criterion:

❖ CCC-A

Workload Calculator	Facility Type		
	All Responses	Elementary	Combination
	<i>n</i> = 230	<i>n</i> = 63	<i>n</i> = 114
Master's	53.5	63.5	49.1
AuD	64.8	52.4	70.2
SLPD or CScD	0.4	0.0	0.9
PhD	1.7	1.6	0.9
Other; doctorate:	0.0	0.0	0.0
Highest Degree			
	<i>n</i> = 229	<i>n</i> = 63	<i>n</i> = 113
Master's	33.6	46.0	28.3
Doctorate	66.4	54.0	71.7
		Statistical significance: $\chi^2(1) = 5.6$, <i>p</i> = .018 , <i>Phi</i> = .178	

Note. AuD = doctor of audiology. SLPD = doctor of speech-language pathology. CScD = doctor of communication science. PhD = doctor of philosophy.



26. (a) How many years have you been employed in the audiology or speech-language pathology profession, and (b) how many of those years were in schools? Round to the nearest full year. Enter "0" if you have never been employed in the professions.

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Response greater than 0

Years	Facility Type		
	All Responses	Elementary	Combination
(a) Total Years in the Professions			
	n = 229	n = 62	n = 114
25th percentile	12.0	17.0	11.0
50th percentile (Median)	24.0	25.0	23.0
75th percentile	31.0	33.0	30.0
Mean	22.5	24.0	21.0
Standard deviation	11.8	11.0	12.0
Mode	30.0	35.0	30.0
		Statistical significance: $F(1, 174) = 2.3$, $p = .130$	
(b) Total Years in the Schools			
	n = 223	n = 61	n = 110
25th percentile	6.0	8.0	5.0
50th percentile (Median)	15.0	16.0	15.0
75th percentile	24.0	27.0	24.0
Mean	15.8	18.0	15.0
Standard deviation	10.6	11.0	11.0
Mode	6.0	8.0	1.0
		Statistical significance: $F(1, 169) = 2.5$, $p = .112$	

27. Which one of the following best describes where most of the students you serve are located? (Percentages)

❖ Clinical service provider

Area	Facility Type		
	All Responses (n = 224)	Elementary (n = 62)	Combination (n = 112)
City/urban area	34.4	33.9	33.0
Suburban area	43.8	41.9	45.5
Rural area	21.9	24.2	21.4
		Statistical significance: $\chi^2(2) = 0.3$, $p = .877$	

28. In what state is your primary employment FACILITY located? Use standard post office two-letter code (e.g., NM for New Mexico).

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

State	n	State	n	State	n
Alabama (AL)	3	Kentucky (KY)	0	North Dakota (ND)	1
Alaska (AK)	3	Louisiana (LA)	5	Ohio (OH)	14
Arizona (AZ)	6	Maine (ME)	0	Oklahoma (OK)	0
Arkansas (AR)	0	Maryland (MD)	9	Oregon (OR)	1
California (CA)	9	Massachusetts (MA)	6	Pennsylvania (PA)	8
Colorado (CO)	10	Michigan (MI)	4	Rhode Island (RI)	0
Connecticut (CT)	3	Minnesota (MN)	10	South Carolina (SC)	4
Delaware (DE)	2	Mississippi (MS)	2	South Dakota (SD)	0
District of Columbia (DC)	2	Missouri (MO)	4	Tennessee (TN)	0
Florida (FL)	7	Montana (MT)	2	Texas (TX)	13
Georgia (GA)	6	Nebraska (NE)	1	Utah (UT)	3
Hawaii (HI)	0	Nevada (NV)	2	Vermont (VT)	1
Idaho (ID)	5	New Hampshire (NH)	0	Virginia (VA)	5
Illinois (IL)	15	New Jersey (NJ)	1	Washington (WA)	15
Indiana (IN)	2	New Mexico (NM)	3	West Virginia (WV)	0
Iowa (IA)	7	New York (NY)	17	Wisconsin (WI)	9
Kansas (KS)	6	North Carolina (NC)	4	Wyoming (WY)	0
				Total	230

(Question 28 continues on next page.)

ASHA 2022 Schools Survey: Survey Summary Report, Educational Audiologists

28. (cont'd) In what state is your primary employment FACILITY located? Use standard post office two-letter code (e.g., NM for New Mexico).

Analyses limited to respondents who met the following criteria:

- ❖ CCC-A
- ❖ Employed full time or part time

Region/Division	Facility Type		
	All Responses (n = 230)	Elementary (n = 63)	Combination (n = 114)
Northeast	15.7	9.5	12.3
Middle Atlantic	11.3	6.3	9.6
New England	4.3	3.2	2.6
Midwest	31.7	31.7	34.2
East North Central	19.1	12.7	21.1
West North Central	12.6	19.0	13.2
South	27.0	30.2	28.1
East South Central	2.2	3.2	0.9
South Atlantic	17.0	19.0	18.4
West South Central	7.8	7.9	8.8
West	25.7	28.6	25.4
Mountain	13.5	20.6	9.6
Pacific	12.2	7.9	15.8
		Statistical significance: FOR 4 REGIONS: $\chi^2(3) = 0.6, p = .906$ FOR 9 DIVISIONS: $\chi^2(8) = 9.9, p = .272$	

Appendix A

Regions of the Country

Regions of the Country

Northeast

- ◆ Middle Atlantic
 - New Jersey
 - New York
 - Pennsylvania
- ◆ New England
 - Connecticut
 - Maine
 - Massachusetts
 - New Hampshire
 - Rhode Island
 - Vermont

South

- ◆ East South Central
 - Alabama
 - Kentucky
 - Mississippi
 - Tennessee
- ◆ South Atlantic
 - Delaware
 - District of Columbia
 - Florida
 - Georgia
 - Maryland
 - North Carolina
 - South Carolina
 - Virginia
 - West Virginia
- ◆ West South Central
 - Arkansas
 - Louisiana
 - Oklahoma
 - Texas

Midwest

- ◆ East North Central
 - Illinois
 - Indiana
 - Michigan
 - Ohio
 - Wisconsin
- ◆ West North Central
 - Iowa
 - Kansas
 - Minnesota
 - Missouri
 - Nebraska
 - North Dakota
 - South Dakota

West

- ◆ Mountain
 - Arizona
 - Colorado
 - Idaho
 - Montana
 - Nevada
 - New Mexico
 - Utah
 - Wyoming
- ◆ Pacific
 - Alaska
 - California
 - Hawaii
 - Oregon
 - Washington

Appendix B

Statistics

Statistics used in this summary report include the following notations and descriptions:

Notation	Description
Response rate	<p>The percentage of individuals who were included in the sample, minus any who were ineligible</p> $RR = \frac{(C + P)}{S - (Ret + I)}$ <p>Where</p> <ul style="list-style-type: none"> RR = Response rate C = Number of completed surveys P = Number of partial surveys S = Sample size Ret = Ineligible because of retirement I = Ineligible for other reasons (e.g., does not work in schools, no longer in the field, on leave of absence) $RR = \frac{230}{649 - (2 + 13)} = 36.3\%$
<i>n</i>	The number in the sample. In this report, the number of people who answered a particular question.
Mean	<p>A measure of central tendency; an average. Add the total of all the values and divide by the number of items.</p> <p>Example: $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$</p>
Standard deviation	<p>A statistic that shows the spread of scores in a distribution. Used with means. The larger the standard deviation, the more widely the scores are spread out around the mean.¹</p> <p>About 68% of the measurement is between 1 standard deviation greater than and 1 standard deviation smaller than the mean; 95% are plus/minus 2 standard deviations.</p> <p>Example: $(1 + 1 + 7 + 34 + 88)$ Standard deviation = 37.1</p> <p>Therefore, 68% of the responses are between -10.9 and 63.3</p>
Median	<p>A measure of central tendency. Arrange the values in order, from lowest to highest. Select the value in the middle position.</p> <p>Example: 1, 1, 7, 34, 88 Median = 7</p>
Appendix table continues on next page.	

Notation	Description
Mode	<p>A measure of central tendency; an average. The value that occurs more frequently than any other value.</p> <p>Example: 1, 1, 7, 34, 88 Mode = 1</p>
Statistical significance	<p>Describes whether a value is larger or smaller than would be expected by chance alone.</p> <p>Note that a large sample size can lead to results that are “statistically significant” even though the results themselves may not have substantive or practical significance. This is particularly true for chi-square (χ^2) tests.¹</p>
Chi-square (χ^2)	<p>A test used to assess the statistical significance of a finding where the variables being assessed are nominal (e.g., annual salary and hourly salary) or ordinal (e.g., excellent, good, fair, and poor). It measures whether there are statistically significant differences between the observed frequencies and the expected frequencies of two variables. The larger the observed frequency is in comparison with the expected frequency, the larger the χ^2 statistic and the more likely the difference is statistically significant. When the sample size is large, large χ^2 values (that is, ones that that are statistically significant) can be obtained even for weak associations.¹</p>
Cramer’s V	<p>A measure of the <u>strength</u> of the association, used with χ^2 statistics to identify the meaningfulness of a relationship. The χ^2 value may be large with a small probability ($p < .05$) of having occurred by chance. That is, it is “statistically significant at the .05 level.” Cramer’s V is a measure of how strong (practically important) the relationship is between the variables. The larger the Cramer’s V, the stronger the association.</p>
ANOVA (F)	<p>F is the statistic computed when conducting an analysis of variance (ANOVA). <i>Analysis of variance</i> measures the differences between means on two or more variables. It is used when independent variables are categorical and a dependent variable is continuous.¹</p>
p	<p>Probability. Found in expressions such as $p = .003$ meaning “The probability that this result could have been produced by chance is 1 in 3/1000ths. The smaller the number, the less likely that the result was due to chance. The p value is the actual probability associated with an obtained statistical result, such as χ^2 or F.¹</p>
df	<p>Degrees of freedom. The number of values that are free to vary when computing a statistic. Used in interpreting both a χ^2 and an F ratio. It is calculated in a cross-tabulation as $(R - 1)(C - 1)$ or (the number of rows minus 1) times (the number of columns minus 1). In a 3×4 table, df would be 6.</p>

¹ Vogt, W. P. (1993). *Dictionary of statistics and methodology*. Sage.

Appendix C

Open-Ended Responses

Question 16. Other Barriers To Achieving a Manageable Caseload Size

- **Finances**
 - Financial approval to work more hours (budget)
 - Lack of funding
 - Lack of funds to hire
 - District not willing to increase my FTE w/ growing numbers
 - District won't hire more
- **Distance**
 - Distance between students
 - Travel & managing coverage of 7 districts
- ASHA guidelines for caseload are not relevant to school board or special ed admins.
- Big fluctuation in hours needed each week
- Drive time; too many meetings
- I am the only educational audiologist.
- I had to cut back on what I can do to make the caseload manageable.
- Increased caseload & district responsibilities
- Large district with preschool-high school, huge variety of resources, lots of special needs
- Other duties--testing
- Paperwork
- Shortage of Ed Aud; no admin spt, & salary
- Shortage of time/too many menial responsibilities not directly student related